

## **NEW CLAIMS**

- 3. A balun, comprising: four coupled planar lines running next to each other; one end of a first of the lines serving as a first balanced connection gate; the other end of the first line being connected to one end of a second of the lines adjacent to the other end of the first line; the one end of the second line being connected to the first line and serving as an unbalanced connection gate; the other end of the second line being connected to ground; one end of a third of the lines lying next to the unbalanced connection gate and being connected to ground; the other end of the third line serving as a second balanced connection gate; one end of a fourth of the lines lying next to the second balanced connection gate and being connected to ground; and the other end of the fourth line being connected to the one end of the second line forming the unbalanced connection gate.
- 4. The balun according to claim 3, wherein the four lines have a coupling length which corresponds to roughly one-quarter of an average operating wavelength of the balun.

